| Ind | ex of | Claims |  |
|-----|-------|--------|--|
|     |       |        |  |

| Application No. | Applicant(s) |  |
|-----------------|--------------|--|
| 09/971,704      | KATO ET AL.  |  |
| Examiner        | Art Unit     |  |
| Thang Tran      | 2653         |  |

| √  | Rejected |
|----|----------|
| 11 | Allowed  |

| _ | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N | Non-Elected  | Α |
|---|--------------|---|
| - | Interference | 0 |

| A | Appeal   |
|---|----------|
| 0 | Objected |

| Cla      | aim      |          |          | _         |                | Date     | =              |                 |          | 150   |  | laim           |                        | Date              | -  |                        | Sil                        | Cla   | aim      |               |  |                 | Date     | <br>e    |          |          | $\neg$   |
|----------|----------|----------|----------|-----------|----------------|----------|----------------|-----------------|----------|-------|--|----------------|------------------------|-------------------|--|------------------------|----------------------------|-------|----------|---------------|--|-----------------|----------|----------|----------|----------|----------|
|          |          | _        |          |           |                |          |                |                 |          |       |  |                |                        |                   |  |                        | ika<br>Kaj                 |       |          |               | Т  |                 |          |          |          | П        |          |
| Final    | Original | 7/24/04  |          |           |                |          |                |                 |          |       | 7                                      | , di           |                        |                   |  |                        |                            | Final | Original |               |  |                 |          |          |          |          |          |
| 🛅        | į        | 124      |          |           |                |          |                |                 |          |       | Final                                  |                | ?                      |                   |  |                        |                            | Ë     | ij       |               |  |                 |          |          |          |          |          |
|          | 0        | 1        |          |           |                |          |                |                 | - 1      | 1911  |  | ١٩             | '                      | - 1 1             |  |                        |                            |       | 0        | 1             |  |                 |          |          |          |          |          |
|          | 1        | v        | П        |           |                | П        |                | $\Box$          | 十        |       |  | 5              |                        | -11               |  | H                      | 0.00                       |       | 101      | _             | +  | ╁┈┤             |          | $\dashv$ | $\dashv$ | $\dashv$ | ┪        |
|          | 2        | v        | П        |           |                |          |                | $\Box$          | 十        |       |  | 5              |                        |                   |  | Н                      | 33                         |       | 102      | $\dashv$      |  | ╁               |          |          | $\dashv$ | +        | ┪        |
|          | 3        | v        |          |           |                |          |                |                 |          |       | -                                      | 5              |                        | <u> </u>          |  | П                      |                            |       | 103      | $\neg \vdash$ | †  | $\vdash$        |          |          | 7        | 十        | ᅱ        |
|          | 4        | 0        |          |           |                |          |                |                 |          | - 150 | -                                      | 5              |                        |                   |  | $\vdash$               |                            |       | 104      | $\dashv$      |  |                 |          |          | $\dashv$ | 十        | ᅥ        |
|          | 5        | v        | П        |           |                |          |                |                 | $\neg +$ |       |  | 5              |                        |                   |  | Н                      |                            |       | 105      | _             | _  | Н               |          |          | $\dashv$ | -+       | $\dashv$ |
|          | 6        | v        |          |           |                |          |                |                 |          |       |  | 5              |                        |                   | <del>- </del>                                    | П                      |                            |       | 106      | $\neg$        |  | Н               | $\dashv$ | $\neg$   | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 7        | 0        | П        |           |                | $\Box$   |                |                 |          | 7     |  | 5              |                        |                   | 1  | Н                      |                            |       | 107      | $\dashv$      |  | Н               | $\neg$   | $\neg$   | $\dashv$ | +        | ᅥ        |
|          | 8        | v        | П        |           |                | $\vdash$ |                | $\vdash$        | $\dashv$ |       | <b>—</b>                               | 5              |                        | ++                |  |                        |                            |       | 108      |               |  | Н               | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 9        | v        |          |           |                |          |                | $\Box$          | -        |       |  | 5              |                        | $\dashv$          |  | Н                      |                            |       | 109      | $\dashv$      |  | $\vdash$        |          |          | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 10       |          |          |           |                |          |                |                 | -        |       | \$ <del></del>                         | 6              |                        |                   |  | Н                      |                            |       | 110      | $\dashv$      | <del>                                     </del> | $\vdash$        |          |          | 十        | $\dashv$ | ٦        |
|          | 11       |          | H        |           | $\vdash$       | $\dashv$ | $\vdash$       | $\vdash$        | $\top$   | 145   | -                                      | 6              |                        | $\dashv$          | ++-  | H                      |                            |       | 111      | $\dashv$      | _  | Н               | $\vdash$ | $\dashv$ | $\dashv$ | +        | $\dashv$ |
|          | 12       | $\vdash$ | $\vdash$ |           | $\dashv$       |          |                | $\vdash$        | $\dashv$ |       | 1                                      | 6              |                        |                   | ++-  | $\vdash$               |                            |       | 112      | $\dashv$      | +  | $\vdash$        |          | $\dashv$ | $\dashv$ | +        | $\dashv$ |
|          | 13       | $\vdash$ | $\dashv$ | _         | $\dashv$       |          |                | $\dashv$        | +        |       | -                                      | 6              |                        |                   |  | H                      | W)                         |       | 113      |               | +  | $\vdash$        |          | -        | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 14       | H        | H        | 7         | $\vdash$       |          |                | $\vdash$        | $\dashv$ |       | -                                      | 6              |                        |                   | ++   | $\vdash$               |                            |       | 114      | -             | +  | $\vdash$        |          | -        | $\dashv$ | $\dashv$ | ᅱ        |
|          | 15       |          |          |           | $\dashv$       |          |                | $\dashv$        |          | -     |  | 6              |                        |                   | <del>- - </del>                                  | -                      | 700000<br>200000<br>200000 |       | 115      | -+            | +-   | ╁╌┤             | $\vdash$ | -        | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 16       | $\vdash$ | $\vdash$ | -         | $\dashv$       |          |                | $\vdash$        | $\dashv$ |       |  | 6              |                        |                   | + +  | $\vdash$               |                            |       | 116      | $\dashv$      | +  | Н               | $\vdash$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 17       | Н        | $\vdash$ |           | -              |          |                |                 | $\dashv$ | 100   |  | 6              |                        | +                 | +  | $\vdash$               |                            |       | 117      | $\dashv$      | +  | $\vdash$        | $\vdash$ | $\dashv$ | $\dashv$ | $\dashv$ |          |
|          | 18       |          | $\vdash$ |           | $\dashv$       |          |                | $\vdash$        | $\dashv$ | 1000  |  | 6              |                        | +                 | ++-  | $\vdash$               | 120                        |       | 118      | $\dashv$      | +  | Н               |          | $\dashv$ | $\dashv$ | +        | $\dashv$ |
|          | 19       |          | -        | -         | 一              |          |                | $\dashv$        |          | -     | -                                      | 6              |                        | $\dashv$          | ++-  | Н                      |                            |       | 119      | -             | ╁┈   | Н               | -        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 20       | Н        | $\vdash$ |           |                |          | $\dashv$       | $\vdash \vdash$ | $\dashv$ | -     | -                                      | 7              |                        | +                 | ++-  | Н                      |                            |       | 120      | $\dashv$      | +  | $\vdash$        |          |          | $\dashv$ | $\dashv$ | ᅱ        |
|          | 21       |          | H        | -         |                |          | $\dashv$       | H               | -+       | -     | 1                                      | 7              |                        |                   | <del>  -</del>                                   | $\vdash \vdash$        |                            |       | 121      |               | +  | Н               | $\dashv$ |          | -+       | -+       | $\dashv$ |
|          | 22       |          | $\vdash$ |           |                | -        | -              | $\vdash$        | $\dashv$ |       | <u> </u>                               | 7              |                        | +                 | ++-  | Н                      |                            |       | 122      |               | +  | $\vdash$        | -        | -        | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 23       |          | $\vdash$ |           | $\dashv$       |          | -              | $\vdash$        | +        | -     | -                                      | 7              |                        | -+                | ++-  | $\vdash \vdash$        |                            |       | 123      | $\dashv$      | +  | $\vdash$        |          |          | $\dashv$ | +        | $\dashv$ |
|          | 24       |          | $\vdash$ | -         | $\vdash$       | $\dashv$ | $\dashv$       | $\vdash$        | +        | 4     | $\vdash$                               | <del>'</del> 7 |                        | +                 | ++   | $\vdash$               |                            |       | 124      | $\dashv$      | +  | $\vdash$        | $\dashv$ | $\dashv$ | $\dashv$ | -+       | $\dashv$ |
|          | 25       | _        |          |           |                | $\dashv$ |                | $\dashv$        | +        | -     | -                                      | <del>'</del> 7 |                        | +                 | ++   | H                      |                            |       | 125      | +             | +-   | $\vdash$        | _        |          | $\dashv$ | +        | $\dashv$ |
|          | 26       |          |          | -         |                | $\dashv$ |                | $\dashv$        | +        | -     | -                                      | <del>'</del> 7 |                        | +                 | +  | $\vdash$               |                            |       | 126      | +             | +  | Н               |          |          | $\dashv$ | $\dashv$ |          |
|          | 27       | П        |          |           |                | -        |                | $\dashv$        | $\dashv$ | 1     |  | <del>'</del> 7 |                        | +                 | ++   | Н                      |                            |       | 127      |               | +  | H               |          | +        | $\dashv$ | $\dashv$ | $\dashv$ |
| $\vdash$ | 28       | <b>—</b> |          | $\dashv$  |                |          |                | $\dashv$        | +        | -54   | -                                      | <del>'</del> 7 |                        |                   | +  | H                      |                            |       | 128      |               | +  | $\vdash$        | $\dashv$ |          | $\dashv$ | +        | $\neg$   |
|          | 29       |          |          | $\exists$ |                | $\dashv$ | $\dashv$       | $\dashv$        | $\dashv$ | - SA  |  | 7              |                        |                   |  | $\vdash \vdash$        |                            |       | 129      | +             | +-   | $\vdash$        |          | -        | $\dashv$ | $\dashv$ |          |
|          | 30       |          |          |           |                | $\dashv$ |                | _               | $\dashv$ | -     | 2                                      | 8              |                        | +                 | +++  | Н                      |                            |       | 130      |               | +-   | $\vdash$        | -        | -        | +        | +        |          |
|          | 31       | -        | -        | $\dashv$  | -              | $\dashv$ |                | $\dashv$        | +        | -     | -                                      | 8              |                        | <del>- - </del> - | +  | $\vdash \vdash$        |                            |       | 131      |               | +-   | $\vdash \vdash$ |          |          | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 32       | _        | $\dashv$ | -         | -              | $\dashv$ | $\dashv$       | $\dashv$        | 十        | 1     | 1                                      | 8              |                        | ++-               | ++-  | $\vdash \vdash \vdash$ |                            |       | 132      | +             | +  |                 | $\dashv$ | $\dashv$ | $\dashv$ | +        | $\dashv$ |
| _        | 33       | _        | $\dashv$ | $\dashv$  |                | $\dashv$ | -              | $\dashv$        | 十        | 1     | $\vdash$                               | 8              |                        | <del>-    </del>  | + +  | H                      |                            |       | 133      | $\dashv$      | +  | $\vdash$        | -        | $\dashv$ | $\dashv$ | +        |          |
| $\vdash$ | 34       | <u> </u> | -        | ᅱ         |                | $\dashv$ | $\dashv$       | $\dashv$        | +        | 1     | -                                      | 8              |                        | ++                | ++   | H                      |                            |       | 134      | +             | +  | $\vdash$        |          | $\dashv$ | -+       | +        | $\dashv$ |
|          | 35       |          | $\dashv$ | $\dashv$  | $\dashv$       |          | $\dashv$       | -               | +        | 13    | 1                                      | 8              |                        | -                 | +  | H                      |                            |       | 135      | +             | +-   | $\vdash \vdash$ |          | $\dashv$ | $\dashv$ | +        | $\dashv$ |
|          | 36       | H        | $\dashv$ | $\dashv$  | $\neg$         |          | $\dashv$       | $\vdash$        | +        | -100  | 1                                      | 8              |                        | ++                | + +  | H                      |                            |       | 136      | $\dashv$      | +-   | $\vdash$        | $\dashv$ | $\dashv$ | $\dashv$ | -+       | $\dashv$ |
|          | 37       | Н        | $\dashv$ | $\dashv$  | $\dashv$       | $\dashv$ | -+             | $\dashv$        | +        | -     | -                                      | 8              |                        | ++                | ++   | $\vdash$               |                            |       | 137      |               | +  | $\vdash$        |          | $\dashv$ | $\dashv$ | +        | $\dashv$ |
|          | 38       | Н        | $\dashv$ | $\neg$    | $\dashv$       | $\dashv$ | $\dashv$       | $\dashv$        | $\dashv$ | -     | -                                      | 8              |                        | +                 | + +  | H                      |                            |       | 138      | +             | +  | $\vdash \vdash$ | $\dashv$ | -        | -+       | +        | ᅴ        |
|          | 39       | Н        | -        |           | $\dashv$       |          | _              | $\dashv$        | +        |       | -                                      | 8              |                        | +                 | + + -  | H                      |                            |       | 139      |               | +  | $\vdash$        | $\dashv$ |          | +        | +        | $\dashv$ |
|          | 40       |          | $\dashv$ |           | $\dashv$       | $\dashv$ | 1              | $\dashv$        | +        |       | -                                      | 9              |                        | +                 | ++   | H                      |                            |       | 140      |               | +  | -               | -        | +        | +        | +        | ᅱ        |
|          | 41       |          | $\dashv$ |           | $\dashv$       | $\dashv$ | $\dashv$       | $\dashv$        | +        | -     | <u> </u>                               | 9              |                        |                   | ++   | $\vdash$               |                            |       | 141      | +             | +  | $\vdash \vdash$ |          | -        | +        | +        | $\dashv$ |
|          | 42       | $\vdash$ | $\dashv$ |           | $\dashv$       | $\dashv$ | $\neg$         | $\dashv$        | +        | -     | <b>!</b>                               | 9              |                        | ++                | + + -  | H                      |                            |       | 142      | +             | +-   | $\vdash$        |          | $\dashv$ | +        | +        | $\dashv$ |
| $\vdash$ | 43       | $\vdash$ | $\dashv$ | $\dashv$  | ┈┼             | $\dashv$ | $\dashv$       | $\dashv$        | +        |       | -                                      | 9              |                        | ++                | + + -  | $\vdash$               | M                          |       | 143      | +             | +-   | $\vdash$        |          | $\dashv$ | $\dashv$ | +        | $\dashv$ |
|          | 44       | $\vdash$ | $\dashv$ | +         | $\dashv$       | +        | $\dashv$       | $\dashv$        | +        | -     | -                                      | 9              |                        | +                 | <del>                                     </del> | Н                      |                            |       | 144      | _             | +-   |                 | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 45       | Н        | $\dashv$ | -         | $\dashv$       |          | $\dashv$       | $\dashv$        | $\dashv$ | 192   |  | 9              |                        | ++                | +  | Н                      |                            |       | 145      | $\dashv$      | +-   | ┝               | $\dashv$ | $\dashv$ | +        | +        | ᅱ        |
|          | 46       |          | $\dashv$ | 寸         | $\dashv$       |          | +              | $\dashv$        | +        |       | $\vdash$                               | 9              |                        | <del></del>       | + + -  | $\vdash$               | <b>.</b>                   |       | 146      | +             | +  | $\vdash$        | $\dashv$ | $\dashv$ | -        | $\dashv$ | $\dashv$ |
|          | 47       |          | $\dashv$ | +         | $\dashv$       | _        | $\neg \dagger$ | $\dashv$        | $\dashv$ | 1     | $\vdash$                               | 9              | <del>-   -   -  </del> |                   | +  | Н                      | <b> </b>                   |       | 147      | $\dashv$      | +  | H               | $\dashv$ | $\dashv$ | -+       | $\dashv$ | $\dashv$ |
|          | 48       |          | $\dashv$ | ┪         | $\dashv$       | -+       |                | +               |          |       | -                                      | 9              |                        | +                 | + + +  | $\vdash$               |                            | -+    | 148      | $\dashv$      | +-   | ┢╌┤             |          | $\dashv$ | -+       | +        | $\dashv$ |
|          | 49       | $\neg$   | $\dashv$ | _         | $\neg \dagger$ | $\dashv$ | -              | $\dashv$        | 十        | -60   |  | 9              |                        | +                 | +  | Н                      |                            |       | 149      |               | +-   | $\vdash$        |          |          | $\dashv$ | +        | ⊣        |
|          | 50       | _        | $\dashv$ | -         | $\dashv$       | $\dashv$ | -              | $\dashv$        | +        | 1     | 1                                      | 10             | <del>ot        </del>  | <del>-   </del>   | 1-1-1  | $\vdash$               |                            |       | 150      | $\dashv$      | +-   | $\vdash$        | -        | -+       | +        | $\dashv$ | $\dashv$ |
| I        |          |          |          | _         |                |          |                |                 |          |       | ــــــــــــــــــــــــــــــــــــــ | 1.0            | ~                      |                   |  | السا                   | 55486                      |       | 100      |               |  |                 |          | 1        | i_       |          | - 1      |